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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,315	01/28/2004	Raymond Hauser	36400.36US2	5478

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EXAMINER	
ORDERS, CHRISTOPHER H	

ART UNIT	PAPER NUMBER
3746	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/767,315	RAYMOND HAUSER ET AL.	
	Examiner	Art Unit	
	Christopher H. Orders	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *March 29, 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Applicant has failed to provide the examiner with copies of the foreign patent documents and non-patent literature.

The information disclosure statement filed March 29, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

2. The drawings are objected to because:

- The recitation of "37a" (fig. 2, occurrence on the right) is presumed to be --37b-- to properly reference a portion of the second pump.
- The recitation of "20a" (fig. 2, occurrence on the right) is presumed to be --20b-- to properly reference a portion of the second pump.
- The recitation of "32a" (fig. 3, occurrence on the right) is presumed to be --32b-- to properly reference a portion of the second pump.
- The recitation of "33a" (fig. 3, occurrence on the right) is presumed to be --33b-- to properly reference a portion of the second pump.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: The recitation of "FIG. 2" (pg. 4, ln. 16) is presumed to be --FIG. 5-- to properly reference the drawings. Additionally, the recitation of "bearing 77" (pg. 9, ln. 1) is presumed to be --bearing 97-- to properly reference the drawings.

Appropriate correction is required.

Claim Objections

4. Claim 1 is objected to because of the following informalities: The recitation of "pump shaft" (ln. 14) is presumed to be --pump shafts-- to clarify that there are two separate shafts.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiantelassa (2,914,219) in view of Ohashi et al. (6,487,856).

Chiantelassa teaches a pump apparatus comprising: a pump housing (141, an unlabeled center section, and 142) having a first pump chamber (formed by 141) and a second pump chamber (formed by 142) formed therein; a first pump (3) and a first swash plate (13') engaged thereto mounted in the first chamber (formed by 141), and a first adjustment mechanism (18, 20a, 20) engaged to the first swash plate (13'); a second pump (2) and a second swash plate (13") engaged thereto mounted in the second chamber (formed by 142), and a second adjustment mechanism (19, 20b, 20) engaged to the second swash plate (13"); a linear pump shaft (17) drivingly engaged to the first pump (3) and second pump (2); an input shaft (8') mounted in the pump

housing (center section between 141 and 142) and drivingly engaged to the pump shaft (17), where at least one end of the input shaft (8') extends out of the pump housing (center section between 141 and 142) and the longitudinal axis of the input shaft (8') is perpendicular to the longitudinal axes of the pump shaft (17); a first end cap (141) mounted to the pump housing (unlabeled center portion) adjacent to the first pump chamber (formed by 141) and a second end cap (142) mounted to the pump housing (unlabeled center portion) adjacent the second pump chamber (formed by 142); a first pump (3) rotatably mounted on the first end cap (141) and a second pump (2) rotatably mounted on the second end cap (142); a first set of system ports (30, 31) formed in the first end cap (141) and the second end cap (142) mounted to the pump housing (unlabeled center portion) adjacent the second pump chamber (formed by 142) and has a second set of system ports (30, 31) formed therein, where the first set of system ports (30, 31) extend into the first end cap (141) in a direction perpendicular to the longitudinal axis of the input shaft (8'); and a mounting flange (at the connection of 141 and the unlabeled center section of the housing) formed on the pump housing adjacent to the first set of system ports (30, 31).

Chiantelassa does not expressly teach a first trunnion arm engaged to the first swash plate and extending out of the pump housing; a second trunnion arm engaged to the second swash plate and extending out of the pump housing; a first pump shaft drivingly engaged to the first pump and a second pump shaft drivingly engaged to the second pump which is collinear to the first pump shaft; the first and second trunnion arms are mounted parallel to one another and perpendicular to the longitudinal axis of

the input shaft; the first and second trunnion arms both extend out of the same side of the pump housing; the first trunnion arm extends out of a first side of the pump housing and the second trunnion arm extends out of a second side opposite to the first side of the pump housing; both ends of the input shaft extend out of the pump housing; and the first and second sets of system ports extend into their respective end cap in a direction parallel to the longitudinal axis of the input shaft.

However, Ohashi et al. teach a first trunnion arm (115a) engaged to a first swash plate (114a) and extending out of the pump housing (120); a second trunnion arm (115b) engaged to the second swash plate (114b) and extending out of the pump housing (120); a first pump shaft (111a) drivingly engaged to the first pump (110a) and a second pump shaft (111b) drivingly engaged to the second pump (110b) which is collinear to the first pump shaft (111a); the first (115a) and second (115b) trunnion arms are mounted parallel to one another and perpendicular to the longitudinal axis of the input shaft (111a, 111b); the first (115a) and second (115b) trunnion arms both extend out of the same side of the pump housing (120) (fig. 40); the first trunnion arm (115a) extends out of a first side of the pump housing (120) and the second trunnion arm (115b) extends out of a second side opposite to the first side of the pump housing (120) (fig. 4); and both ends of the input shaft extend out of the pump housing (230) (fig. 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the trunnion arms and dual shaft arrangement of Ohashi et al. with the tandem pump of Chiantelassa for the benefit of alternate pump arrangements wherein the swash plate inclination angles are adjustable via external levers for remote

control (col. 12, ln. 30-36) and the shaft is made of two pieces which may reduce component shipping costs. Additionally, it is well known within the art to use system ports in end caps that are parallel to the axis of the input shaft as shown by Chiantelassa by ports 10 and 11 extending parallel to input shaft 8' in end cap 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H. Orders whose telephone number is (571) 272-7163. The examiner can normally be reached on Monday-Friday, 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571) 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHO

Timothy S. Thorpe
Supervisory Patent Examiner
Group 3700